

October 30, 1986

Dear Manufacturer:

CD-86-17 (LDV, LDT, HDE)

Subject: Resetting Warning Devices for Emission Control
System Maintenance

OMS Advisory Circular (A/C) No. 36B entitled Warning Devices for Emission Control System Maintenance was issued to clarify the provisions of the regulations contained in 40 CFR 86.082-25(a)(5). These regulations stated that EPA approval of maintenance for certain items would be based on the determination that the need for maintenance is indicated by an overt sign of malfunction. This overt sign of malfunction may include the activation of a warning device, either audible or visual. The following is intended to update existing guidance regarding the specific requirement to reset warning or failure devices.

Our original guidance evolved around light-duty vehicle maintenance warning lights that would activate within the 50,000-mile regulated useful life (typically, activation occurred around 30,000 miles). EPA's position was that approval of the maintenance would be granted to the manufacturer if (1) the device was a resettable design, and (2) resetting the device or light was part of the actual maintenance operation. This policy was based upon an initial warning that would activate within the first half of the actual full useful life. Subsequent warning outside this point and at the same mileage interval is desirable since most vehicles would still be in operation through several maintenance cycles.

On March 15, 1985, EPA promulgated regulations (40 CFR 86.087-25) that extended certain critical emission-related maintenance intervals for light-duty trucks and heavy-duty engines well into the second half of their "full useful lives." This has necessitated the establishment of maintenance guidance beyond the 50,000 mile point. Further, manufacturers are now concerned that the second activation of a warning device may occur when a vehicle is nearing the end of its actual useful life thereby rendering resetting of the device unnecessary. This letter clarifies our requirements for the resetting of warning and failure devices based on the full useful life of the vehicle. The guidance in A/C No. 36B is still pertinent to light-duty vehicles (LDV's) through the 1987

model year as they still may have warning devices that may activate within the 50,000 mile regulated useful life. Similarly, the condition for EPA approval of the maintenance operation within the first 50,000 miles is still pertinent--any warning device must be resettable. However, the new regulations applicable to the 1988 model year (40 CFR 86.088-25) make the whole issue of approval of warning devices for LDV's a moot point as no critical emission-related maintenance will be permitted within their 50,000 mile regulated useful life. We encourage manufacturers to voluntarily use warning devices for critical emission-related maintenance operations that are needed on LDV's after 50,000 miles to assure proper emission performance of vehicles over the remainder of their full useful lives. However, the requiring of such devices and conditions for their approval is outside the scope of our current regulations.

Scheduled Maintenance Warning Devices for Light-Duty Trucks and Heavy-Duty Engines

A signal or light which is scheduled to operate at a maintenance interval which falls on or within the first half of the full useful life of the vehicle must be resettable. For light-duty trucks and heavy-duty engines we will use the full useful lives specified in 40 CFR 86.085-2, as follows:

Light-duty trucks	120,000 miles
Gasoline heavy-duty engines (HDE's)	110,000 miles
Light diesel HDE's	110,000 miles
Medium diesel HDE's	186,000 miles
Heavy diesel HDE's	210,000 miles

The signal must, therefore, be capable of being reset each time if it is scheduled to reactivate within the full useful life of the vehicle. Similarly, if the initial activation occurs beyond the first half of the full useful life point we will not require a resettable device, assuming the reactivation interval is the same as the first.

Component Failure Lights

The regulations also allow for the use of a component failure light--a light which is activated by failure of the component

itself. A component failure light must always be resettable since these warnings are notification of required unscheduled maintenance and could occur anytime at random intervals over the life of the vehicle.

If there are further issues as a result of this guidance, they may be handled on a case-by-case basis through the certification teams.

Sincerely yours,

Robert E. Maxwell, Director
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Office of Mobile Sources